

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Preserving the Open Internet)	GN Docket No. 09-191
)	
Broadband Industry Practices)	WC Docket No. 07-52

To the Commission:

**Comments from Nickolaus E. Leggett
On The Notice of Proposed Rulemaking**

I am one of the original petitioners for the establishment of the Low Power FM (LPFM) radio broadcasting service (RM-9208 July 7, 1997 subsequently included in MM Docket 99-25). I am also a certified electronics technician (ISCET and iNARTE) and an Extra Class amateur radio operator (call sign N3NL). I hold an FCC General Radiotelephone Operator License with a Ship Radar Endorsement. I am an inventor holding three U.S. Patents. My latest patent is a wireless bus for digital devices and computers (U.S. Patent # 6,771,935). I have a Master of Arts degree in Political Science from the Johns Hopkins University. I am also one of the petitioners in the docket to establish a low power radio service on the AM broadcast band (RM-11287).

The Notice of Proposed Rulemaking

My comments are in response to the Notice of Proposed Rulemaking (NPRM) adopted by the Commission on October 22, 2009 and released on October 22, 2009. Comments in this proceeding are due on January 14, 2010.

My comments are directed at specific points and questions presented in the NPRM.

Content, Applications, or Services Dependent on Quality of Service

In Paragraph 113 (on Page 44), the Commission asks: “Are there particular content, applications, or services whose quality and utility to end users depends on a broadband Internet access service provider’s assuring a certain quality of service?”

One such service is remote control of distant devices, tools, or equipment by control inputs that are input by the user and responses that are reported back to the user by video images and other data flows. This remote control technology enables the user to do specific work, such as controlling a lathe or drill press, at a distance. Using remote control is greatly assisted by having a short response time (low network delays) and a stable and predictable response time. It is hard to operate a remote machine when the response time is varying by significant amounts. Response time stability requires that the provider delivers a high quality of service through the entire Internet link from the user to the remote machine that the user is controlling.

It is likely that the appeal of remote control will increase over the years. So the market for this premium service will increase. Vendors will want to have control over the quality of service provided for remote control applications.

Another service that may require a special quality of service is the transmission of three-dimensional (3D) video content. The television industry is strongly interested in manufacturing 3D televisions in the near-term future. Combining these televisions with Internet delivery of 3D movies and 3D video calls would be a powerful offering to customers. The Commission’s engineering staff needs to consider if 3D services will actually require a special quality of service to be successful.

“Beneficial” Discrimination

In Paragraph 114 on Page 44, the Commission asks the question: “Does the separate regulatory category of managed or specialized services allow beneficial discrimination to serve the public?” In addition there is the related question: “...should we instead adopt a rule prohibiting only unreasonable discrimination?”

I am very cautious about the concept of beneficial discrimination. The central question here is: beneficial for whom? A policy of discrimination may be highly beneficial for the network providing a specialized service. At the same time, such a policy could deprive small organizations and individuals from meaningful access to the Internet.

In addition, the difficulty in determining what is beneficial or unreasonable greatly favors the large organizations. They can afford the services of powerful law firms that will advocate their views of beneficial and unreasonable. In contrast, the small organizations and individuals will not be able to afford to challenge the big firms’ definitions of beneficial or unreasonable. The little guy just cannot afford to compete in court and so he has little effective recourse against the large competitors.

This problem can be overcome by having very specific rules that are easy to interpret and which are not left to the judgment of individual judges. In addition, the Commission’s rules should explicitly state that the value of open access to the Internet is more important than the commercial value of providing a new or enhanced service. For example, remote control services should take a back seat to having open access to Internet communications. Technological innovations such as partially autonomous robotics could allow remote control over communications services that have widely

varying delay times. With this technology the user specifies the task he wants to accomplish (such as tighten this bolt) and the destination robotic system takes care of the details of the action.

Nondiscrimination Rules and Civic Participation

In Paragraph 116 on Page 44, the Commission asks: “We also seek comment on whether our proposed nondiscrimination rule will promote free speech, civic participation, and democratic engagement. Would discrimination by access providers interfere with these goals?”

A strong nondiscrimination rule is needed to protect citizens’ basic freedom of speech and their freedom to assemble via the Internet. A nondiscrimination rule protects the existence of web sites and web broadcasting operated by individuals and by small groups. These citizen-based efforts could easily be swept off of the Internet by discriminatory pricing and by the priority transmission for the data transmitted by favored organizations.

In addition, a nondiscrimination rule protects the right of a small entrepreneur to participate in the American economy (which is increasingly conducted on the Internet). Furthermore, such a rule would protect the rights of independent inventors (such as me) to the opportunity to create inventions related to the Internet. Our economy cannot afford to suppress individual inventors who can contribute a lot to the competitive position of our economy in the World. We must not have a situation where the Internet town square is reserved just for giant organizations and the regular citizens are excluded from participating and competing.

Requested Actions

The Commission should establish a broadband “Bill of Rights” that will allow individual Americans and small organizations the basic right to broadcast and communicate over broadband. This Bill of Rights should include the following features:

1. All individual Internet stations have the right to broadcast and communicate over the Internet without interference by corporations and/or government.
2. Any charges or fees must be applied equally to users without favoritism.
3. If broadband usage exceeds existing capacity, usage can be rationed (in terms of bits per second) with all Internet users having the same proportional reduction in capacity for the duration of the shortage. There must be no favoritism at all for large organizations.
4. Government and/or private organizations may not monitor the content of Internet transmissions unless such monitoring is done by lawful court order. This will establish the appropriate privacy of Internet web casts, web sites, and email traffic.
5. First Amendment rights on the Internet shall be the same as the First Amendment rights for print and radio/TV broadcast media.
6. Intellectual property rights, such as copyright, shall be the same as the rights applying to print and radio/TV broadcast media.
7. All Internet station journalists and bloggers shall be recognized as legitimate journalists with the same rights of access as print or conventional broadcast station journalists.

8. The freedom of association and assembly shall apply to gatherings conducted on the Internet.

We must protect all Americans' access to Internet broadcasting and all other uses of the Internet. This is basic to America's democratic future.

Respectfully submitted,

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